

4-H Computer Projects Ideas for Leaders

There are three levels of the 4-H Computer Project. Following are suggestions for learning activities, fair exhibits, demonstrations, and judging classes in each of these levels as well as recommendations for age and skill level in each level. These are offered as ideas. These are guidelines only, not rules.

Even though these ideas are presented by project level, you are welcome to use ideas from other levels if it is applicable to what you have been doing in the project.

Many software programs would be suitable we suggest you work with what you have . .

Some Extension Offices offer access to a public computer. You should check with your Extension office to see if a public access computer is available and to see if you need to make an appointment to use it.

A 4-H Computer Related Web site: <http://www.youthlearningnet.org>

Level 1 Booting Up: Interacting with Computers

Recommended for ages 8-10. First year in project with little or no prior computer experience

Suggested Learning Activities

- Parts of the computer system: Mouse, Keyboard, Monitor, Floppy Drive, etc
- Basic keyboarding: Home Row, use of various keys (shift, backspace, delete, etc)
- Following a menu by using keys and/or mouse
- Proper care of computer - Care and storage of disks and CDs
- Basic Computer terms
- History of the Computer
- Any age appropriate Computer Games
- Create flyers, cards, or banners using Print Shop or similar program
- Beginning use of a Word Processing Program
- Investigate how computers are used on the job - Field Trips
- Computer Terms
- Internal parts of a computer (Old Computers are often available for this)
- Keyboarding practice - Mavis Beacon Teaches Typing or similar programs

Suggestions for Fair Exhibits

- Cards, Flyers, Banners, Certificates, etc. created with the aid of a program such as Print Shop or Hallmark Creative (attach note card to tell how item was created or place in notebook on poster showing steps.
- Card File or Notebook with glossary of computer terms.
- Educational display showing parts of computer (internal) or showing correct connections for a computer (could use an old computer, drawings or mock up out of cardboard

- Flow chart showing the steps in creating a card or other item, how to play a game or how to access information from CD encyclopedia such as En Carte
- Poster or other educational display identifying parts of a computer
- Poster or photos showing proper hand placement on keyboard
- Drawing of hands with keys typed with each finger written on the fingers
- Educational display, poster or photos showing proper storage of disks or CDs
- Simple greeting cards or flyers with note cards or poster telling how they were made
- Homemade Storage box for CDs
- Note Book with Glossary of Computer Terms
- Story or letter or other demonstration of keyboarding skills

Suggestions for Demonstrations

- Proper set up of a computer (connections)
- Use of function keys or "hot keys" in a certain program
- Steps in producing a flyer, certificate, card, etc.
- How to access & save material using a word processing program
- Accessing information on a CD encyclopedia
- Parts of a computer
- Proper finger position on keyboard
- Do and Don't of computer care & disk or CD storage & use
- How to follow the Menu (steps to making a greeting card or playing a game)
- Effects of a magnet on a computer disk

Suggestions for Judging classes

- Correct & incorrect ways of placing hands on keys
- Correct procedure closing down and turning of a computer
- Storage boxes for disks

Suggested Judging Classes:

- Flow charts showing steps in creating a card or similar item
- Cards, Flyers, Banners, Certificates, etc with different fonts, graphics, and borders (identify appropriateness, neatness, appropriateness of combinations i.e. fonts complement graphics)

Letter, Memo or other item created using a work processing program (also could be used for Fair Exhibit)

Level 2 Adding On: Hardware and Software Magic

Recommended for ages 11-14 third or fourth year in project or have quite a bit of prior computer experience.

Suggested Learning Experiences

- More advanced work processing (creating special items –newsletters, programs, etc. using special effects)
- Beginning Spread Sheets
- Creating a Data Base
- Beginning Programming
- Parts of a computer (Internal)
- Safety practices (virus risks, backing up)
- Advanced Computer Games
- Special applications (envelopes, labels, etc.)
- Consumer skills – What to look for when buying a computer, hardware or software.
- Using E-mail (e-mail etiquette)
- Searching for information on the web
- Developing a Web Page (Basics of HTML)
- Downloading files
- Safety practices on the INTERNET (giving out name, address, SS number & other information)
- Ethics of using information from the web (copyrights)
- Evaluating information from the web.
- E-mail pen pals
- Access local library (must have a library card) and reserve a book or check on availability of a particular book.
- Scavenger Hunt - Give members a list of items or names to look up and see who can complete the task the quickest.
- 4-H Cyber Camp

Suggestions for Fair Exhibits

- Cards, Certificates, etc created without the aid of a program such as Print Shop (using a word processing program to import graphics, manipulate text, etc.)
- Simple Newsletters or report using columns, charts, tables, graphs or other special features
- Calendars, Address Books, Programs, etc. (Include note card telling what program was used)
- Spread Sheets showing income and expense (invent data or use for another 4-H project such as a livestock project, Babysitting, lawn mowing)
- Educational Displays illustrating any learning activity in this project
- Flow chart showing steps in installing a program on computer or in setting up a data base
- Computer Program written by project member
- Web Pages (for 4-H Club, project group, sports club etc.)
- Poster, Notebook or Card File showing flow chart, web sites or other information on accessing information.
- Printouts of information obtained from INTERNET with information on how it was obtained.

Suggestions for Demonstrations:

- Demonstrate a simple program written by the member
- Use of a spreadsheet program
- Using charts, tables, graphs or other special application
- Doing a web search
- Using e-mail
- Ideas for Judging Classes:
- Evaluating different sources of information from the web
- Correct forms for e-mail (e-mail etiquette)
- Home Pages (setup – ease of use – use of colors and patterns)

Suggestions for Judging Classes:

- Newsletters, charts, report, etc illustrating use of work processing features (placement of graphics in text, choice of font, general layout)
- Choices of paper for special project
- Flow Chart showing steps in creating Newsletter, program, etc.
- Information about various software with prices - Consumer skills

Level 3 Reaching Beyond: The Advanced User

Recommended for ages 13 or over with four or more years in the computer project or a great deal of prior computer experience.

Suggested Learning Experiences:

- In depth learning in any of the following areas
- Desk top publishing
- Spread Sheets
- Programming
- Computer Repair or upgrading
- History of the Computer industry
- Exploring careers in Computers
- Suggestions for Fair Exhibits:
- Newsletters or brochures
- Spread Sheets, Graphs or charts
- Programs written by member
- Educational Displays illustrating information on workings of a computer, history, or careers in computers or ways computer are used in the home (on ovens, in cars, etc)
- Advanced glossary of computer terms
- Flow Chart or time line showing history of computer development

- Display giving information about careers involving computers.

Suggestions for Demonstrations:

- Same as for Level II
- Consumer skills (features to look for in a computer hardware or software)

Suggestions for Judging Classes:

Any item under level II

- Programs (if members have studied programming)
- A Consumer Class of software or hard ware